Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
	)	
Spectrum Policy Task Force Report	)	ET Docket No. 02-135
	)	

COMMENTS OF THE WIRELESS COMMUNICATIONS ASSOCIATION INTERNATIONAL, INC.

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EXECUTIVE SUMMARY

The Wireless Communications Association International, Inc. ("WCA") applauds the release of the Spectrum Policy Task Force Report (the "SPTF Report") and the various SPTF Working Group Reports that support it. Some of the core concepts endorsed in the SPTF Report (*e.g.*, flexible use, secondary markets, regulatory certainty, grouping of technically compatible users in adjacent spectrum) are plainly in the public interest, and in fact lie at the heart of WCA's regulatory agenda for the wireless broadband industry, including, most recently, WCA's proposals for (1) a complete overhaul of the technical and licensing rules applicable to the Multipoint Distribution Service ("MDS") and the Instructional Fixed Television Service, (2) relocation of incumbent MDS licensees from the 2150-2162 MHz band to create additional spectrum for third generation ("3G") mobile service, (3) the adoption of service rules for wireless broadband service in the 70/80/90 GHz bands and (4) the creation of a viable band plan for wireless licensees in the 36.0-51.4 GHz band.

By the same token, the release of the SPTF Report highlights how some of the Commission's existing rules are at odds with the core concepts listed above. Wireless providers continue to be shackled by remnants of the Commission's "command and control" approach to regulation, and thus cannot introduce new services as quickly as consumers demand. It is beyond argument that the evolution of wireless services to the flexible use model will not be easy – as noted by Chairman Powell, "[r]evolutions and infrastructure build-outs take time," and inevitably wireless providers will be required to discontinue "legacy" operations while transitioning from old businesses to new ones. Yet under the Commission's remaining "command and control" rules, wireless providers run the risk of losing their licenses if they discontinue operations for even a short period of time pending transition. This hardly encourages the innovation and investment necessary to deliver new wireless services to consumers, and thus it is essential that the Commission eliminate this regulatory "disconnect" immediately.

Furthermore, while WCA endorses further study of the SPTF's "interference temperature" concept, it is imperative that the Commission not allow the ongoing high-level dialogue about the subject to delay resolution of existing proceedings or other immediate matters of concern to the wireless broadband industry that can and should be resolved now. Indeed, there is every indication that evaluation of the interference temperature model will be a highly complex endeavor – while WCA supports the underlying goal of the model (*i.e.*, more certainty as to the permissible level of interference in the RF environment), it is WCA's preliminary view that that "interference temperature" is not a "one size fits all" solution, and that there will be substantial practical problems in applying the concept.

Finally, the Commission must take care not to apply the SPTF's generalized assumptions about licensing policy to frequency bands in which those assumptions are not correct. For example, the SPTF suggests that the "commons" model may be well-suited to frequency bands over 50 GHz, on the theory that spectrum in those bands is characterized by low scarcity and high transaction costs. Commenting parties in the Commission's 70/80/90 GHz docket, however, have overwhelmingly rejected that approach and demonstrated why some form of licensing protection is absolutely essential to the success of wireless broadband service in the upper millimeter wave bands.

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The Wireless Communications Association International, Inc. ("WCA"), in response to the Office of Engineering and Technology's November 25, 2002 *Public Notice* in the above-captioned proceeding, hereby submits its comments on the November 2002 Report (the "SPTF Report") and supporting Working Group Reports issued by the Commission's Spectrum Policy Task Force ("SPTF").[1]

I. INTRODUCTION.

WCA is the trade association of the wireless broadband industry. Its membership includes a wide variety of wireless broadband system operators, equipment manufacturers and consultants interested in the deployment of licensed and unlicensed spectrum for wireless broadband service in, *inter alia*, the 2.1 GHz, 2.3 GHz, 2.4 GHz, 2.5 GHz, 5 GHz, 18 GHz, 24 GHz, 28 GHz, 31 GHz, 38 GHz and 70/80/90 GHz bands. WCA is also the founder of the License Exempt Alliance ("LEA"), a nationwide coalition of service providers, equipment vendors and others who offer or support the provision of wireless broadband service via the 902-

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[1] Public Notice, *Commission Seeks Public Comment on Spectrum Policy Task Force Report,* ET Docket 02-135, FCC 02-322 (Nov. 25, 2002).

928 MHz, 2.4 GHz and 5 GHz bands under Part 15 of the Commission's Rules.[2] Whether in its own name or under the auspices of the LEA, WCA has participated in virtually every major Commission proceeding affecting the deployment of licensed and license-exempt spectrum for wireless broadband service. Accordingly, WCA has an immediate and substantial interest in the SPTF's findings and any subsequent Commission inquiries or rulemakings that may arise therefrom.

Plainly, the SPTF Report has much to recommend it. Indeed, the Report embraces a number of core concepts (*e.g.*, flexible use, secondary markets, regulatory certainty, grouping of technically compatible users in adjacent spectrum) that lie at the heart of WCA's regulatory agenda for the wireless broadband industry, including its proposals for (1) a complete overhaul of the technical and licensing rules applicable to the Multipoint Distribution Service ("MDS") and the Instructional Fixed Television Service ("ITFS"), (2) relocation of incumbent MDS licensees from the 2150-2162 MHz band to the 1910-1916/1990-1996 MHz band to create additional spectrum for third generation ("3G") mobile service, (3) the adoption of service rules for wireless broadband service in the 70/80/90 GHz bands, and (4) the creation of a viable band plan for wireless licensees in the 36.0-51.4 GHz band.[3] At the same time, however, the Task Force's proposed "interference temperature" concept and suggested licensing models for

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[2] The LEA is filing separate comments on the SPTF Report, addressing the SPTF's findings with respect to license-exempt spectrum.

[3] *See, e.g.,* "A Proposal To Revise The MDS and ITFS Regulatory Regime," The Wireless Communications Association International, Inc., Catholic Television Network and The National ITFS Association, RM-10586 (filed Oct. 7, 2002) (the "MDS/ITFS White Paper"); Letter from BellSouth Corporation, *et al.*, to Michael K. Powell, Chairman, Federal Communications Commission, ET Docket No. 00-258 (filed July 11, 2002) (the "Joint MDS Reallocation Compromise"); Comments of The Wireless Communications Association International, Inc., WT Docket No. 02-146 (filed Nov. 1, 2002) (the "WCA Upper Millimeter Wave Comments").

wireless service raise a number of very difficult legal, technical and economic issues that require much more study and industry consensus before the Commission should even begin to consider incorporating them into its regulatory paradigm for wireless services. While WCA supports further Commission inquiry into these concepts, the Commission should not permit that dialogue to delay resolution of existing proceedings or attempt to apply them to existing situations where they clearly do not fit.

II. DISCUSSION.

A. Flexible Use Must Remain the Cornerstone of the Commission's Rules and Policies for Wireless Services.

As noted in the SPTF Report:

> [Flexible use] enables spectrum users to make fundamental choices about how they will use spectrum (including whether to use it or transfer their usage rights to others), taking into account market factors such as consumer demand, availability of technology, and competition. By leaving these choices to the spectrum user, this approach tends to lead to efficient and highly-valued spectrum uses. In most instances, a flexible use approach is preferable to the Commission's traditional "command-and-control" approach to spectrum regulation, in which allowable spectrum uses are limited based on regulatory judgments.[4]

WCA agrees. As the wireless broadband industry continues to evolve in response to changing consumer demand, it is imperative that the Commission create a regulatory environment that gives wireless broadband providers maximum latitude to determine how to deliver existing services and create new ones in the most economically and spectrally efficient manner possible. The history of the MDS/ITFS service, to cite one example, is a case study in how legacy "command and control" regulation has been rendered obsolete by marketplace

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[4] SPTF Report at 16.

forces,[5] and why flexible use is the superior approach.[6] In fact, the Commission has acknowledged as much in expanding the MDS/ITFS allocation in the 2500-2690 GHz band to include mobile as well as fixed services and the rationale for flexible use there applies with equal force to wireless broadband providers in other spectrum where technically feasible.[7]

By the same token, Chairman Powell has aptly noted that "[r]evolutions and infrastructure build-outs take time," and that "[t]he convergence of industries, where advanced networks allow entities in traditionally distinct market segments to enter into each other's markets and into new similar markets, demands that we rationalize our regulatory regime to address these changes."[8] Put another way, the wireless industry's transition to flexible use will take time, as wireless licensees undertake the complex and costly process of transitioning from old businesses to new ones as necessary to satisfy consumer demand. During that process, wireless providers inevitably will be required to discontinue obsolete operations pending

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[5] *See, e.g,* MDS/ITFS White Paper at 1-6 (discussion evolution of MDS/ITFS industry from one-way, high-power, line of sight distribution of multichannel video programming via "first generation" technology to two-way, lower power, non-line of sight cellularized distribution of broadband service via "second generation" technology).

[6] *See, e.g., Amendment of the Commission's Rules Regarding the 37.0-38.6 GHz and 38.6-40.0 GHz Bands*; 12 FCC Rcd 18600, 18615 (1997) (adopting flexible use policy for 38 GHz licensees); *Allocation of Spectrum Below 5 GHz Transferred From Federal Government Use*, 11 FCC Rcd 624, 631 (1995) ("The flexible GWCS approach should permit a range of qualified uses . . . while permitting new technologies and services to emerge and encouraging efficient use of spectrum.").

[7] *See Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems,* 16 FCC Rcd 11222, 11236 (2001) (awarding mobile allocation to MDS/ITFS licensees in the 2500-2690 MHz band) (the "*3G First Report and Order*"). WCA has urged the Commission to extend the same flexible use allocation to MDS channels 1/2/2A. *See* Comments of The Wireless Communications Association International, Inc., ET Docket No. 00-258, at 14-15 (Oct. 22, 2002) (the "WCA Further Notice Comments").

[8] Remarks of Michael K. Powell, Chairman, Federal Communications Commission, at the Broadband Technology Summit, U.S. Chamber of Commerce, Washington, D.C. (Apr. 30, 2002), available at http://www.fcc.gov/Speeches/Powell/2002/spmkp205.html.

transition to their new business model(s). Logically, then, the flexible use paradigm requires Commission rules that do not penalize wireless providers for exercising their flexible use rights and terminating "legacy" operations when transitioning from one service to another.

Unfortunately, the Commission's "command and control" approach still governs here, and actually exposes wireless providers to a substantial risk that they will lose their licenses if they discontinue operations as described above. A particularly egregious example can be found in virtually identical Sections 21.44(a)(3) and 101.65(a) – under those rules, a license for a station is automatically forfeited without further notice to the licensee upon the voluntary removal of or alteration of the facilities so as to render the station not operational for thirty days. *In a flexible use environment, there is no public interest benefit to be gained by forcing wireless providers to maintain obsolete operations as a quid pro quo for preserving their licenses*.[9] If the SPTF's embrace of flexible use is to be given any effect at all, the Commission must eliminate these sorts of provisions from *all* of its wireless rules as soon as possible.

B. The Commission Should Adopt A Secondary Markets Policy For All Wireless Services.

Like the SPTF, WCA endorses the use of secondary markets as a means of promoting access to spectrum and introducing new technologies to the marketplace.[10] The secondary markets concept (under which licensees would be permitted to lease the spectrum usage rights to

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[9] WCA, in conjunction with the Catholic Television Network and the National ITFS Association, has asked for an immediate suspension of Section 21.44(a)(3) and similar MDS/ITFS rules pending Commission action on its proposal for a comprehensive rewrite of the MDS/ITFS rules to facilitate delivery of broadband service via non-line of sight, "second generation" customer premises equipment. *See,* MDS/ITFS White Paper at 44-46; First Supplement to MDS/ITFS White Paper, RM-10586, at 5-7 (filed Nov. 14, 2002) ("BellSouth MDS/ITFS Rule Rewrite Comments"); Comments of BellSouth Corporation and BellSouth Wireless Cable, Inc., RM-10586, at 6-10 (filed Nov. 14, 2002).

[10] *See, e.g.,* SPTF Report at 6, 57.

third parties) has been a staple of the Commission's MDS/ITFS rules for twenty years, and has proven to be mutually beneficial to MDS/ITFS channel lessors and lessees alike.[11] Indeed, well before the release of the SPTF Report, the Commission had tentatively concluded that an across-the-board secondary markets policy "will facilitate full utilization of spectrum by the highest value end users,"[12] and "make more spectrum available for existing services that are spectrum-constrained, while ensuring that the needs of the public are served."[13] The Commission should transform these conclusions into concrete rules and policies for all wireless providers as soon as possible, provided that those rules and policies give wireless spectrum lessors and lessees the freedom to construct leasing arrangements that will result in the most economic and spectrally efficient use of spectrum in their individual circumstances.[14]

C. The Commission Must Accord The Highest Priority To Eliminating Regulatory Uncertainty in the Wireless Broadband Industry.

On the question of regulatory uncertainty, the SPTF has it exactly right: ""[A] level of certainty regarding one's ability to continue to use spectrum, at least for some foreseeable period, is an essential prerequisite to investment, particularly in services requiring significant

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[11] *See, e.g., Amendment of Part 74 of the Commission's Rules Governing Use of the Frequencies in the Instructional Television Fixed Service*, 9 FCC Rcd 3360, 3364 (1994).

[12] *Principles for Reallocation of Spectrum to Encourage the Development of Telecommunications Technologies for the New Millennium*, 14 FCC Rcd 19868, 19872 (1999).

[13] *Id.* at 19876; *see also* Comments of Cellular Telecommunications & Internet Association, ET Docket No 00-258, at 7-8 (filed Feb. 22, 2001) (supporting "voluntary secondary market arrangements" as a means of providing additional spectrum for 3G).

[14] *See, e.g., Amendment of Parts 21 and 74 to Enable Multipoint Distribution Service and Instructional Television Fixed Service Licensees to Engage in Multipoint Distribution Service and Instructional Television Fixed Service Licensees to Engage in Two-Way Fixed Transmissions*, 13 FCC Rcd 19112, 19159 (1998) (rejecting "one size fits all approach to MDS/ITFS channel leasing).

infrastructure and lead time."[15] This is most certainly the case with respect to MDS licensees in the 2150-2162 MHz band: for the past two years and counting, they have been forced to live with the ongoing uncertainty over when and to what spectrum they might be relocated in order create more auctionable spectrum for 3G in the 2110-2170 MHz band.[16] During the bulk of that time, neither the Commission nor any proponent of taking the MDS spectrum identified any comparable relocation spectrum to which MDS licensees in the 2150-2162 MHz band could be moved. Hence, to eliminate this untenable situation once and for all, the MDS/ITFS industry took a proactive approach and offered a highly detailed, "win-win" relocation proposal that, if adopted, would relocate MDS channels 1/2/2A to paired spectrum at 1910-1916 MHz and 1990-1996 MHz and require MDS licensees to operate under the Commission's technical rules for broadband PCS in the 1.9 GHz band.[17] Quite simply, the proposal has been shown to be the *only* workable solution for clearing the 2150-2162 MHz band for 3G and relocating MDS licensees to anything approaching comparable spectrum.[18]

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[15] SPTF Report at 23.

[16] *See Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services*, 16 FCC Rcd 596, 619-622 (2001); *id.*, 16 FCC Rcd 16043, 16601 (2001). In its *First Report and Order* in ET Docket No. 00-258, the Commission concluded that incumbent MDS/ITFS licensees should not be displaced from the 2500-2690 MHz band, but left open the question of whether and to where MDS licensees in the 2150-2162 MHz licensees should be relocated to accommodate 3G.

[17] *See* Joint MDS Reallocation Compromise, n.3 *supra.* In addition to eliminating the ongoing uncertainty over MDS relocation once and for all, the proposal would, among other things, provide the Commission with a contiguous block of spectrum at 2110-2170 MHz that could be reallocated and reauctioned for 3G in the near term, minimize potential dislocation of other potentially affected services in and around the 2 GHz band, and eliminate the need for large guardbands around MDS operations.

[18] *Id.* at 7-13; *see also* Letter from The Wireless Communication Association International, Inc., *et al.*, ET Docket No. 00-258, IB Docket No. 01-185 and WT Docket No. 02-55, at 2-3 (filed Sept. 5, 2002); The Wireless Communication Association International, Inc., *et al.*, ET Docket No. 00-258, IB Docket No. 01-185 and WT Docket No. 02-55, at 10 (filed Aug. 29, 2002).

Unfortunately, notwithstanding the MDS/ITFS industry's good faith, the Commission recently exacerbated the problem by reallocating a portion of the 2150-2162 MHz band for 3G *without identifying any comparable relocation spectrum for MDS licensees.*[19] To add insult to injury, the Commission did not even provide MDS licensees with a timeframe for its resolution of the issue; instead, the Commission merely states that it must "address certain issues regarding MDS operations," without proving any clue whatsoever as to when it will resolve the issue. Ironically, at the same time the Commission acknowledges the need to "minimize uncertainty to existing licensees."[20] What could create more uncertainty and a greater deterrent to investment than advising licensees that they will have to relocate to some unknown spectrum at some unknown time in the future?

Clearly, it is impossible to reconcile the Commission's handling of the MDS relocation issue with the Spectrum Policy Task Force's call for greater regulatory certainty. The Commission should not dismiss the seriousness of this problem – MDS licensees have spent hundreds of millions of dollars at auction and in post-auction secondary markets to acquire rights to the 2150-2162 MHz band and develop operations in that spectrum. As WCA has already reported to the Commission, this threat of relocation has cast a pall over the MDS/ITFS industry's efforts to develop advanced technology for use on MDS channels 1/2/2A.[21] If the principles underlying the SPTF report are to have any meaning at all, the Commission must resolve this matter immediately.

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[19] *See Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems*, ET Docket No. 00-258, FCC 02-304, at ¶¶ 40-41 (rel. Nov. 15, 2002).

[20] *Id.* at ¶ 41.

[21] *See, e.g.,* WCA Further Notice Comments, n.7 *supra.*

D. The Task Force's "Interference Temperature" Concept Requires Further Industry Dialogue and More Detailed Fact-Finding By The Commission.

Generally speaking, WCA concurs with certain of the core interference protection principles endorsed in the SPTF Report. For example, as demonstrated by the current debate over affording Mobile Satellite Service licensees the flexibility to provide terrestrial services, flexible use necessarily complicates interference protection analyses to a substantial degree.[22] WCA agrees that the Commission can alleviate this problem by "[allocating] spectrum to radiocommunication services within the same frequency band or to services in adjacent frequency bands in a way that places the fewest technical and regulatory constrains on all of the services in that spectrum."[23] Indeed, the SPTF's "good neighbor" concept is the foundation of WCA's proposal to relocate MDS channels 1/2/2A to the 1910-1916/1990-1996 MHz bands. Expedited grant of this proposal would therefore represent a significant first step towards giving effect to the SPTF's recommendations and accommodating flexible use in an increasingly congested spectral environment.

Clearly, however, the Task Force takes a giant leap into unchartered territory by recommending that the Commission gradually shift from a transmitter-oriented to a receiver-oriented paradigm for measuring harmful interference.[24] The suggested metric for this approach

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[22] *See* SPTF Report at 25-26.

[23] *See* Federal Communications Commission Spectrum Policy Task Force, Report of the Interference Protection Working Group, at 20 (Nov. 15, 2002); SPTF Report at 22 ("In addition to improving access to spectrum through flexible use policies, . . ., it may be desirable, where possible, to group technically compatible systems and devices in close spectrum proximity. . . The Task Force believes that the Commission should consider making spectrum policy decisions encouraging like systems or devices to be grouped in spectrum 'neighborhoods' with like systems.").

[24] *Id.*

is "interference temperature," which would measure the RF power available at the receiving antenna per unit of bandwidth.[25] While WCA endorses further study of the "interference temperature" concept and supports its underlying objective (*i.e.*, creating greater certainty as to the permissible level of interference in the RF environment), the Commission must go slowly both to assure protection of existing service and that the ongoing dialogue on the subject does not delay resolution of existing proceedings or other issues of immediate concern to the wireless broadband industry. Those proceedings include, for example, the creation of a viable band plan for the 36.0-51.4 GHz band and elimination of interference from satellite operations sharing that spectrum,[26] and the creation of service rules for wireless broadband service in the 70/80/90 GHz bands.[27] As discussed above, the wireless broadband industry is already facing substantial regulatory uncertainty on multiple fronts - the Commission will only compound the problem by injecting "20,000 foot" discussions of interference temperature into those matters.

Furthermore, as the Commission forges ahead with its study of "interference temperature," it should not assume that the key to resolving harmful interference lies in filtering or other "quick fix" modifications of receiver equipment. While WCA understands the attraction of shifting the blame for interference to poorly designed receivers, the fact remains that the issue is hardly that simple and requires much more study before the Commission takes any further action on the subject.

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[25] *Id.* The SPTF suggests that the interference temperature metric could be used to "establish maximum permissible levels of interference, thus characterizing the 'worst case' environment in which a receiver would be expected to operate." *Id.* at 28.

[26] *See, e.g.,* Comments of The Wireless Communications Association International, Inc., IB Docket No. 97-95 (filed Sept. 4, 2001).

[27] *See* WCA Upper Millimeter Wave Comments, n. 3 *supra.*

More broadly, WCA has identified several circumstances where reliance on the interference temperature metric would produce misleading or inconsistent results, and others are likely to arise as the matter is studied further. One such circumstance involves systems in which the susceptibility to interference varies by frequency, the best known example of which is NTSC television. An interfering signal in some parts of a TV channel can be objectionable at signal levels that are unnoticeable if the signal is shifted in frequency—all while maintaining the same total interfering energy in the TV channel. Similarly, any broad average measurement of interference temperature would not take into account any variation of the interference temperature over space. For example, high interference temperature near a PCS base station would disable receivers operating with that base station, even where the average interference temperature in the market is otherwise acceptable. Also, broad average noise figures would not take into account variations of the interference temperature with the time of day or signal polarization.

The notion of a broad average interference temperature also does not take into account the concerns of equipment designers and manufacturers. Equipment that would only cause a minor rise in the interference temperature if one thousand units were sold would cause far greater concerns if a million units were sold. Likewise, suppose that the interference temperature rules were such that an apartment could contain one operating cordless phone but not two, or one operating microwave oven but not two. How could interference temperature restrictions be enforced in these situations? The cordless phones might be programmed to react to the interference environment, but microwave ovens are transmitters without paired receivers. This raises the larger question as to whether interference temperature is a useful metric given the proliferation of unlicensed incidental radiators operating under Part 15 or Part 18 of the Commission's rules.

Broadcast systems (in which a single signal is transmitted to many receivers) provide an example of an application where the noise temperature is a questionable spectrum management tool. Consider, for example, a digital broadcast service such as ATSC or DBS. These systems exhibit a threshold effect – that is, keeping all other factors constant, as interference increases the picture quality is only slightly degraded until a threshold level of interference is reached. After that threshold is reached, the picture quality falls off quickly. Thus, an average measure of interference temperature over a geographic region will be of little import. Rather, what matters to the viewer is the interference temperature at the antenna of his or her system. The nature of these digital systems may also mean that a pulsed interference source, *e.g.,* one that is at a high–level for one second and then at a low–level for ten seconds, creates highly objectionable interference, whereas an interference source that transmits continuously transmitting all the time at low power creates no noticeable interference whatever. Accordingly, any noise temperature that is based on time or space averages has the potential to be profoundly flawed when used as a spectrum management tool for broadcast systems.

E. The SPTF's Generalized Assumptions About Licensing May Not Be Accurate For Certain Frequency Bands.

The Commission must take care not to apply the SPTF's generalized assumptions about licensing policy to frequency bands in which those assumptions are not correct. For example, the SPTF suggests that the "commons" model may be well-suited to frequency bands over 50 GHz, on the theory that spectrum in those bands is characterized by low scarcity and high transaction costs. Commenting parties in the Commission's 70/80/90 GHz docket, however, have largely rejected that approach and demonstrated why some form of licensing protection is absolutely essential to the success of wireless broadband service in the upper millimeter wave bands. As stated by Loea Communications Corporation:

> After having developed the technology, spent endless hours advocating for a reasonable regulatory environment, obtaining funding, and built network infrastructure, the [upper millimeter wave] providers will still have to sell their products and services to end users. Loea has already spoken to many potential users . . . and these entities have clearly stated that they require service quality – that is, non-interference guarantees – comparable to wired technologies. This requirement could easily be achieved in a licensed environment and with minimal cost. However, in an unlicensed environment, Loea would have to meet these demands by installing additional facilities, which significantly increases the cost of deployment. In effect, by opting for an unlicensed approach, the Commission would be imposing a "competition tax," which would hobble this technology vis-à-vis its well-established wireline competition. In the end, it would slow the overall deployment of this technology. This is especially troubling when one considers that the "blanket" licensing alternative is so straightforward and so easily achieved.[28]

It is precisely this sort of "on the ground" information that ultimately must guide the Commission's determinations of how, when and where to implement the ideas discussed in the SPTF Report. WCA asks that all future proceedings relating to the SPTF Report be conducted with this principle in mind.

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[28] Comments of Loea Communications Corporation, WT Docket No. 02-146, at 16 (filed Dec. 18, 2002). *See also* WCA Upper Millimeter Wave Comments at 13-14; Comments of the Fixed Wireless Communications Coalition, WT Docket No. 02-146, at 10-11 (filed Dec. 18, 2002); Comments of Sprint Corporation, WT Docket No. 02-146, at 5-6 (filed Dec. 18, 2002); Comments of Comsearch, WT Docket No. 02-146, at 7 (filed Dec. 18, 2002); Comments of Cisco Systems, Inc., WT Docket No. 02-146, at 17-21 (filed Dec. 18, 2002).

III. CONCLUSION.

Again, WCA believes that the SPTF Report is, at bottom, a good beginning. Subject to the concerns discussed above, WCA looks forward to participating in any further Commission proceedings that may arise from the SPTF's findings.

Respectfully submitted,

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